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EXAMINER

SWERDLOW, DANIEL

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,878	Applicant(s) PHILLIPS ET AL.	
	Examiner Daniel Swerdlow	Art Unit 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 and 43-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 through 41 and 43 through 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al. (WO 01/19005 A1) in view of Bowen et al. (US Patent 6,580,710).
3. International application WO 01/19005 A1 is prior art to the instant application under 35 USC 102(b) based on its publication date of 15 March 2001. For convenience, in the rejections below examiner makes reference to column and line numbers in US Patent 6,819,682, the disclosure of which is identical. The only exception is the rejection of Claim 11, which is based on Fig. 1 of Appendix A of the published international application. While the appendices in the published international application are in the prosecution record of the application for US Patent 6,819,682, they are not included in that patent publication.
4. Regarding Claim 1, Rabenko discloses a cable modem (Fig. 2, reference 2600; Fig. 3, reference 2300; column 4, lines 46-55) that corresponds to the network interface device claimed and comprises: an interface to an HFC network (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed and receives internet, television and telephone (i.e., a plurality of telecommunication services) (column 2, line 64-column 3, line 21) using Data Over Cable Service Interface Specifications (column 3, lines 47-

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52); interfaces to an HPNA network, a computer, a telephone and a television receiver (Fig. 2, reference 2015, 2012, 2014; column 3, lines 32-46) that correspond to the at least two distinct internal interfaces claimed and are connected to twisted pair wires, USB cable, telephone cord and coaxial cable that correspond to the internal transport media claimed; and a DOCSIS CPE controller (Fig. 3, reference 2313; column 6, lines 65-66) that corresponds to the processor claimed and receives combined signals from the HFC network interface that corresponds to the external interface claimed and separates and maps those signals to one of the interfaces to an HPNA network, a computer, a telephone and a television receiver that correspond to the internal interfaces claimed (column 3, lines 21-46). Therefore, Rabenko anticipates all elements of Claim 1 except a second external interface that receives an additional telecommunication service, the signal comprising which is combined with one of the separate signals to create a combined signal that is mapped to an internal interface. Bowen discloses a broadband communication interface (Fig. 3, reference 301; column 3, lines 41-49) that, in addition to a coaxial cable interface 304, has a twisted pair interface 303 that corresponds to the second external interface claimed and combines telephone signals that correspond to the additional telecommunication service claimed with data signals that correspond to one of the separate signals claimed to form an HPNA signal that corresponds to the combined signal claimed and is mapped to a phone line distribution interface that corresponds to the internal interface claimed (column 3, lines 50-62). Owen further discloses that such an arrangement provides broadband services to customer premises without the expense and inconvenience of installing new network wiring (column 2, lines 24-34). It would have been obvious to one skilled in the art at the time of the invention to apply mapping of a combination of telephone services from one external interface and data

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services from another external interface onto an internal interface as taught by Bowen to the cable modem taught by Rabenko for the purpose of realizing the aforesaid advantage.

5. Regarding Claim 2, Rabenko further discloses provision of 2-way services such as internet access and telephony via the DOCSIS CPE controller (column 3, lines 40-46).

6. Regarding Claim 3, Rabenko further discloses the interfaces to an HPNA network, a computer and a telephone (Fig. 2, reference 2015, 2012, 2014; column 3, lines 32-46) that correspond to the at least two distinct internal interfaces claimed receive internet and telephone signals (i.e., signals relating to telecommunication services) (column 2, line 64-column 3, line 21) from their respective media.

7. Regarding Claim 4, Rabenko further discloses provision of 2-way services such as internet access and telephony via the DOCSIS CPE controller (column 3, lines 40-46). As such, Rabenko discloses receiving separate signals from the respective media, and combining them onto the HFC network interface (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed using Data Over Cable Service Interface Specifications (column 3, lines 47-52).

8. Regarding Claim 5, Rabenko further discloses the DOCSIS CPE controller (Fig. 3, reference 2313) integrates signals from the telephone (Fig. 3, reference 2001) and the HPNA controller (Fig. 3, reference 2311) onto the HFC network interface (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed (i.e., into a combined information set).

9. Regarding Claim 6, Rabenko further discloses an internal interface to a TV set (i.e., coaxial cable) (Fig. 2, reference 2014; column 3, lines 44-46).

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10. Regarding Claim 7, Rabenko further discloses an internal interface to an HPNA network (i.e., twisted pair cable) (Fig. 2, reference 2015; column 3, lines 32-34).

11. Regarding Claim 8, Rabenko further discloses an internal interface to an HPNA network (i.e., the twisted pair cable comprises existing telephone wiring) (Fig. 2, reference 2015; column 3, lines 32-34).

12. Regarding Claim 9, Rabenko further discloses use of Ethernet in place of the HPNA network (column 5, lines 46-51).

13. Regarding Claim 10, Rabenko further discloses provision of television, internet and telephone (i.e., video, data and voice) (column 2, line 64-column 3, line 21).

14. Regarding Claim 11, Rabenko further discloses provision of different services via different frequency ranges (Appendix A, Fig. 1).

15. Regarding Claim 12, Rabenko further discloses use of Ethernet and IEEE 802.11 (column 5, lines 46-54).

16. Regarding Claim 13, Rabenko further discloses an internal interface to an HPNA network (Fig. 2, reference 2015; column 3, lines 32-34).

17. Regarding Claim 14, Rabenko further discloses provision of service from a cable television network and a public telephone network (column 1, lines 57-64). It is not a patentable limitation on the interface device that the additional service is provided by a different business entity.

18. Claims 15 through 28 are essentially similar to Claims 1 through 14 and are rejected on the same grounds.

19. Claims 29 through 41 are essentially similar to Claims 1 through 13 and are rejected on the same grounds.

20. Regarding Claim 43, Bowen further discloses the interface that corresponds to the second external interface claimed is a twisted pair interface 303.

21. Regarding Claim 44, Bowen further discloses the telephone signal that corresponds to the additional signal claimed is a POTS (i.e., analog) signal (column 4, lines 18-20) and the data signal that corresponds to the separate signal claimed is a data-LAN (i.e., digital) signal (column 4, lines 26-31).

22. Regarding Claim 45, Bowen further discloses the telephone signal that corresponds to the additional signal claimed is an Ethernet (i.e., digital) signal (column 4, lines 54-56), the data signal that corresponds to the separate signal claimed is a data-LAN (i.e., digital) signal (column 4, lines 26-31) and the combined signal is a physical layer (i.e., analog) signal (column 4, lines 3-6).

Response to Arguments

23. Applicant's arguments with respect to all pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow
Examiner
Art Unit 2646

ds

8 February 2006